

REMARKS

Claims 1-33 are pending in the application. Claims 1-3, 5, 12-14, 16, 23-25 and 27 are rejected under 35 U.S.C. §102. Claims 4, 6-7, 15, 17-18, 26 and 28-29 are rejected under 35 U.S.C. §103. Claims 8, 11, 19, 22, 30 and 33 are rejected under 35 U.S.C. §112. The Examiner objected to the drawings and specification. The Examiner objected to claims 6, 17 and 28. Claims 8, 19 and 30 are amended. Applicants respectfully traverse the rejections and the objections for at least the reasons stated below and respectfully request that the Examiner reconsider and withdraw all outstanding rejections and objections.

I. DRAWINGS OBJECTIONS:

The Examiner has refused to enter the previous drawing corrections filed on 13 January 2003 because the changes were not shown in red. Paper No. 5, page 2. Applicants have denoted the drawing corrections in red.

The Examiner has objected to Figure 3A as "the Applicant has not highlighted the changing of reference (300) to indicate the entire thread as a whole." Paper No. 6, page 2. Applicants have accordingly amended Figure 3A by having reference 300 refer to the entire flowchart on Figure 3A.

The Examiner has objected to the drawings under 37 C.F.R. §1.84(p)(4) because reference character "306" has been used to designate multiple references in Figures 3A and 4. Paper No. 6, page 2. The Examiner has also objected to the drawings under 37 C.F.R. §1.84(p)(4) because "conditional step 304 continues to step 306 if false, and 306 if true." Paper No. 6, page 2. The Examiner has further objected to the drawings under 37 C.F.R. §1.84(p)(4) because "conditional step 312 continues to step 306, located in Figure 4. Fig. 4 does not continue on after the thread is over and therefore is not disclosed in the drawings what continues after step 440 and 450." Paper No. 6, pages 2-3. Applicants have amended Figure 3A by replacing

one of the steps labeled "306" with the reference number of "307." Further, Figure 4 is a figure illustrating the methodology for performing step 310 in Figure 3A as discussed on page 16, lines 5-6 of the Specification. Hence, the input to step 410 in Figure 4 is from relabeled step 307 in Figure 3A.

II. SPECIFICATION OBJECTIONS:

The Examiner has objected to the specification for failing to provide a brief description of Figure 3D. Paper No. 6, page 3. Applicants accordingly have amended the specification to provide a brief description of Figure 3D.

III. CLAIM OBJECTIONS:

The Examiner has objected to claims 6, 17 and 28 because "the value of the job state is synonymous with a number, whereas the specification refers to the value as being 'WAITING', 'UNREACHABLE', etc." Paper No. 6, page 3. The Examiner further states that "this terminology can be misleading and could further limit the claims." Paper No. 6, page 3. Applicants respectfully disagree that the value of a job state is synonymous with a number. It is canonical in the data processing art that values may be strings, among other value types. Therefore, Applicants respectfully assert that a person of ordinary skill in the art would not be misled by the terminology in the Specification. Moreover, it would be appreciated by those of ordinary skill in the art that the terminology in the Specification is exemplary and not read into the claims, and that any type of value typically used in the data processing art that admits more than a single value may be used to represent the first and second values as recited in claims 6, 17 and 28.

IV. REJECTIONS UNDER 35 U.S.C. § 112:

The Examiner has rejected claims 8, 19 and 30 under 35 U.S.C. §112, second paragraph for containing a limitation with insufficient antecedent basis. Paper No. 6, pages 3-4. The Examiner asserts that the limitation of "said session in response to an error condition" has insufficient antecedent basis in the claim. Paper No. 6, page 3.

The Examiner suggests inserting a comma following the second use of the term "session" in claims 8, 19 and 30. Paper No. 6, page 4. Applicants respectfully contest the assertion that the phrase "said session in response to an error condition" has insufficient antecedent basis. In fact, the phrase "said session in response to an error condition" has antecedent basis as claims 8, 19 and 30 recite if *a session* is available. However, Applicants have inserted a comma after the second use of the term "session" for readability purposes. Applicants appreciate the Examiner's suggestion. Applicants note that claims 8, 19 and 30 are not amended to overcome prior art but to correct a typographical error. The amendments made to claims 8, 19 and 30 are not narrowing in scope and therefore no prosecution history estoppel arises from the amendments to claims 8, 19 and 30. *Festo Corp v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 62 U.S.P.Q.2d 1705, 1711-1712 (2002); 56 U.S.P.Q.2d 1865, 1870 (Fed. Cir. 2000). Further, the amendments made to claims 8, 19 and 30 were not made for a substantial reason related to patentability and therefore no prosecution history estoppel arises from such amendments. *See Festo Corp.*, 62 U.S.P.Q.2d 1705 at 1707 (2002); *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 41 U.S.P.Q.2d 1865, 1873 (U.S. 1997).

The Examiner has rejected claims 11, 22 and 33 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Paper No. 6, page 4. The Examiner states that "performing the steps in response to the callback method is indefinite for the steps are claimed in claim 1 along with claim 8, and therefore it is unclear if retrying the steps is performed or if the steps are done for a first time." Paper No. 6, page 4. Applicants respectfully contest the rejection under 35 U.S.C. §112, as a person of ordinary skill in the art would know what subject matter Applicants regard as their invention. That is, Applicants respectfully assert that a person of ordinary skill in the art would understand the limitations conveyed in the respective claims. In particular one of ordinary skill in the art would know whether

his or her steps of determining if a job is available ..., determining if a session is available and launching the session were performed in response to invoking a callback method. *As long as the functional limitation sets definite boundaries*, as is the case in claims 11, 22 and 33, then the *functional limitation complies with 35 U.S.C. §112, second paragraph*. See *In re Barr*, 444 F.2d 588, 595 (C.C.P.A. 1971); M.P.E.P. §2173.05(g). Accordingly, Applicants respectfully submit that claims 11, 22 and 33 are not indefinite.

V. REJECTIONS UNDER 35 U.S.C. § 102(e):

The Office Action has rejected claims 1-3, 5, 12-14, 16, 23-25 and 27 under 35 U.S.C. § 102(e) as being anticipated by *Williams* (U.S. Patent No. 6,411,982). Applicants respectfully traverse these rejections for at least the reasons stated below and respectfully request the Examiner to reconsider and withdraw these rejections.

For a claim to be anticipated under 35 U.S.C. § 102, each and every claim limitation must be found in the cited prior art reference and arranged as required by the claim. M.P.E.P. § 2131.

Claim 1 is directed to a connection scheduling method. The method includes determining if a job is available for scheduling, and determining, in response to the step of determining if the job is available, if a session is available. The session is included in a pool of sessions, the pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of the job and wherein the session effects an execution of the job. The method further includes launching the session to effect the execution of the job, if the session is available.

Williams does not disclose "determining, in response to said step of determining if said job is available, if a session is available, wherein said session is included in a pool of sessions, said pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of said job and wherein said

session effects an execution of said job" as recited in claim 1 and similarly in claims 12 and 23. The Examiner directs Applicants' attention to column 2, line 58 through column 3, line 2 and column 3, lines 10-26 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5. This teaching in *Williams* states:

Thus, *tasks are transferred from Priority-Ordered queue 108 to In-Service queue 110 on a first-in first-out (FIFO) basis*. Service manager 102 manages an In-Service queue 110. In-Service queue includes *n* execution entries, where *n* is the pre-specified maximum number of scheduled tasks that are allowed to be executed concurrently. When any execution entry in In-Service queue is empty (i.e., becomes available), *service manager 102 transfers the highest priority (in the preferred embodiment, priority is time-ordered) task request from priority-ordered queue to the available execution entry in In-Service queue, and execution of the task request commences*. *Williams*, Column 2, line 58 to Column 3, line 2 (emphasis added).

Thus, *Williams* discloses scheduling task requests in a priority-order queue if the task requests are to be scheduled within a pre-specified time interval. *Williams* further discloses that when an execution entry in an In-Service queue is empty, the highest priority task request in the priority-order queue may be transferred to the In-Service queue. However, this language does not disclose determining if a session is available. Further, this language does not disclose determining if a session is available in response to determining if a job is available. Further, this language does not disclose, at least, a session included in a pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of a job. Instead, *Williams* only discloses scheduling task requests in a priority-order queue in sorted time order. Further, this language does not disclose where the session effects an execution of the job. Thus, *Williams* does not disclose all the limitations of claims 1, 12 and 23, and thus *Williams* does not anticipate claims 1, 12 and 23. M.P.E.P. § 2131.

Williams also does not disclose "launching said session to effect said execution of said job, if said session is available" as recited in claim 1 and similarly in claims 12 and 23. The Examiner directs Applicants' attention to column 3, lines 19-32 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5. This disclosure in *Williams* states:

Once an available execution entry is discovered, the highest priority task request from priority-ordered queue is transferred to the available execution entry in In-Service queue in step 208. This is contingent on its next time due being less than or equal to the current time. In the preferred embodiment, the priority of a task request is measured in terms of time. In step 210, execution of the task request commences. Steps 202 through 210 are repeated continuously.

When a task request completes execution, as determined in step 212, it is removed from the In-Service queue in step 214. It is determined in step 216 whether its next execution time exceeds the pre-specified time interval. Williams, Column 3, lines 19-32 (emphasis added).

Thus, *Williams* discloses transferring the highest priority task request from a priority-ordered queue to the In-Service queue if an available execution entry is discovered in the In-Service queue. *Williams* further discloses that when a task request completes execution it is removed from the In-Service queue. This language does not disclose launching a session. The In-Service queue entries are not taught to be "launchable." They are "slots" for holding task requests that may be executed concurrently. (*Williams*, column 2, lines 61-63.) Necessarily, this language does not disclose launching the session to effect the execution of the job. Further, this language does not disclose launching the session to effect the execution of the job if the session is available. Thus, *Williams* does not disclose all the limitations of claims 1, 12 and 23, and thus *Williams* does not anticipate claims 1, 12 and 23. M.P.E.P. § 2131.

For at least the above reasons, claims 1, 12 and 23 are not anticipated by *Williams*. Claims 2-3, 5, 13-14, 16, 24-25 and 27 each recite combinations of features including the above combinations, and thus are not anticipated for at least the above reasons as well. Claims 2-3, 5, 13-14, 16, 24-25 and 27 recite additional features, which, in combination with the features of the claims upon which they depend, are not anticipated by *Williams*.

For example, *Williams* does not disclose "wherein said *session comprises a thread*" as recited in claims 2, 13 and 24. The Examiner directs Applicants' attention to column 1, lines 47-54 and column 4, lines 21-25 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5. Instead, *Williams* states:

The present invention is a thread-based scheduling governor that regulates the number of scheduled tasks that are executed concurrently. The schedule governor of the invention is implemented using threads. In the system of the invention, a task goes through a life cycle. In infant form, it is given a slot on the file system as a "request file"; it graduates from "in-file" form to "in-memory" form, where it is maintained as an idle thread in a priority-ordered queue. *Williams*, Column 1, lines 47-54.

Scheduler 502 is the starting point for DispatcherQuery 508 navigation. As DispatcherClient 506 objects make method calls on method server_socket of Scheduler 502, they are serviced by DispatchedThread 510 to perform the actual query in a thread within Scheduler 502. *Williams*, Column 4, lines 21-25.

Thus, *Williams* discloses using threads to schedule task requests. While this language discloses threads, this language does not disclose a *session* comprising a thread. Thus, *Williams* does not disclose all the limitations of claims 2, 13 and 24, and thus *Williams* does not anticipate claims 2, 13 and 24. M.P.E.P. § 2131.

Williams also does not disclose "*creating a connection to a target system for said execution of said job*" as recited in claim 3 and similarly in claims 14 and 25.

The Examiner directs Applicants' attention to Figure 5 and column 4, lines 21-37 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5. Instead, *Williams* states:

Scheduler 502 is the starting point for DispatcherQuery 508 navigation. As DispatcherClient 506 objects make method calls on method server_socket of Scheduler 502, they are serviced by DispatchedThread 510 to perform the actual query in a thread within Scheduler 502. DispatcherClients 506 are able to obtain information as to the socket address port of their Scheduler 502, send it a class name and arguments to load a DispatcherQuery 508 on the server side, and wait for the results to come back through the standard output "stdout". DispatcherThreads 510 provides a thread of execution for each DispatcherQueries 508 to perform their work within the process space for Scheduler 502. Dispatcher Thread 510 is itself an instance of DispatcherQuery 508, but is unique in the sense that it represents the head of the query. DispatcherQuery 508 is a query to be performed on Scheduler 502 identified to it through the DispatcherThread 510. *Williams*, Column 4, lines 21-37.

Thus, *Williams* discloses providing a thread to execute a task request. However, this language does not disclose a target system. Further, this language does not disclose creating a connection to the target system. Further, this language does not disclose creating a connection to a target system for the execution of the job. Thus, *Williams* does not disclose all the limitations of claims 3, 14 and 25, and thus *Williams* does not anticipate claims 3, 14 and 25. M.P.E.P. § 2131.

Williams also does not disclose "*launching an error-handling thread in response to an error condition, said error-handling thread releasing said session*" as recited in claim 5 and similarly in claims 16 and 27. The Examiner directs Applicants' attention to column 3, lines 29-37 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5. Instead, *Williams* states:

When a task request completes execution, as determined in step 212, it is removed from the In-Service queue in step 214. It is determined in step 216 whether its next execution time exceeds the pre-specified time interval. If its next execution time does not exceed the pre-specified time interval, the task request is re-entered into priority-ordered queue in sorted position in step 204, and the cycle is repeated. If its next execution time does exceed the pre-specified time interval, the task request is discharged from memory in step 220. *Williams*, Column 3, lines 29-37.

Thus, *Williams* discloses determining whether the task request's next execution time exceeds the pre-specified time interval. *Williams* further discloses that if the task request's next execution time does not exceed the pre-specified time interval, the task request is re-entered into priority-ordered queue in sorted position. *Williams* further discloses that if the task request's next execution time does exceed the pre-specified time interval, the task request is discharged from memory. This language does not disclose launching an error-handling thread. Further, this language does not disclose launching an error-handling thread in response to an error condition. Further, this language does not disclose an error condition. Further, this language does not disclose the error-handling thread releasing the session. Thus, *Williams* does not disclose all the limitations of claims 5, 16 and 27, and thus *Williams* does not anticipate claims 5, 16 and 27. M.P.E.P. § 2131.

As a result of the foregoing, Applicants respectfully assert that not each and every claim limitation was found with *Williams*, and thus claims 1-3, 5, 12-14, 16, 23-25 and 27 are not anticipated by *Williams*.

It is noted that words are italicized only for emphasis. Words that are italicized are not meant to imply that only those limitations are not disclosed in the cited prior art.

VI. REJECTIONS UNDER 35 U.S.C. § 103(a):

The Office Action has rejected claims 4, 6-7, 15, 17-18, 26 and 28-29 under 35 U.S.C. § 103(a) as being unpatentable over *Williams*. The Office Action has further rejected claims 8-9, 19-20 and 30-31 under 35 U.S.C. § 103(a) as being unpatentable over *Williams* in view of *Threlkeld* (U.S. Patent No. 6,502,121). The Office Action has further rejected claims 10-11, 21-22, and 32-33 under 35 U.S.C. § 103(a) as being unpatentable over *Williams* in view of *Threlkeld* and further in view of *Hlasnik, et al* (U.S. Patent No. 5,925,096) (hereinafter "*Hlasnik*"). Applicants respectfully traverse these rejections for at least the reasons stated below and respectfully request the Examiner to reconsider withdrawing these rejections.

A. **Williams does not teach or suggest the following claim limitations.**

Williams does not teach or suggest "*determining if said connection is an existing connection, and wherein said step of creating said connection is performed if said connection is not an existing connection*" as recited in claim 4 and similarly in claims 15 and 26. The Examiner states that "*Williams* does not explicitly disclose determining if connection is an existing connection, and creating the connection is performed if connection is not an existing connection. Official Notice has been taken that a connection will be created if it is not already connected. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of creating a connection only when already not connected, because it would be redundant to connect while already being connected and to request a task to be done would require being connected." Paper No. 6, page 6.

Applicants respectfully traverse the assertion that it is well known in the art of determining if the connection is an existing connection and creating the connection if the connection is not an existing connection. Applicants respectfully request the Examiner to provide a reference that supports the proposition that determining if a

connection is an existing connection in creating the connection if the connection is not an existing connection is well known in the art pursuant to M.P.E.P. 2144.03.

Furthermore, the Examiner has shown why *Williams* should be modified to determine if the connection is an existing connection and creating the connection if the connection is not an existing connection from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). As an initial matter, Applicants note that a search on an electronic version of *Williams* yields no instances of "connection" whatsoever. The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to determine if the connection is an existing connection and creating the connection if the connection is not an existing connection. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002).

Further, Applicants respectfully assert that the Examiner's use of Official Notice is inappropriate. The Examiner is only to use Official Notice for facts asserted to be well known or to be common knowledge in the art that are capable of instant and unquestionable demonstration as being well known. *In re Ahlert*, 424 Fd.2d 1088, 1091, 165 U.S.P.Q. 418, 420 (C.C.P.A. 1970); M.P.E.P. § 2144.03. In this case, the facts asserted to be well known or to be common knowledge in the art are not capable of instant and unquestionable demonstration as being well-known. Further, it is not appropriate for the Examiner to take Official Notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known. *In re Ahlert*, 424 Fd.2d at 1091, 165 U.S.P.Q. 420-21; *See also In re Grose*, 592 Fd.2d 1161, 1167-68, 201 U.S.P.Q. 57, 63 (C.C.P.A. 1979). Further, it is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as a principle evidence upon which a rejection was based. *In re Zurko*, 258 F.3d 1379, 1385,

59 U.S.P.Q.2d 1693, 1697 (Fed. Cir. 2001). Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 4, 15 and 26.

Williams also does not teach or suggest "changing value of a job state from a first value to a second value in response to said launching of said error handling thread" as recited in claim 6 and similarly in claims 17 and 28. The Examiner states that "*Williams* fails to explicitly disclose changing value of a job state from a first value to a second value in response to said launching of said error handling thread. Official notice has been taken that the "value" of a job state changes when the task is discharged from memory. (Paper No. 3, page 6) (citing *Williams*, Column 3, lines 29-37). Applicants respectfully disagree with the Examiner's taking of Official Notice on several grounds. As an initial matter, the claim does not recite changing a value of a job state..."when a task is discharged from memory." Thus, the taking of Official Notice does not address the claim as recited. Additionally, the taking of Official Notice is improper. It is never appropriate to reply on Official Notice as the principal evidence on which the rejection of claim 6 (as well as claims 17 and 28) is based. MPEP § 2144.03. Applicants respectfully traverse the taking of Official Notice with respect to claim 6 (as well as claims 17 and 28) and respectfully request the Examiner to provide object evidence to support the allegation that changing a value of a job state from a first value to a second value in response to the launching of the error-handling thread is well-known in the art.

The Examiner also asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement using a job state value to indicate that the task is 'DISCHARGED', 'PENDING', etc., because this could enhance visibility of the exact status of the requested task." Paper No. 6, pages 6-7. The Examiner has not shown why *Williams* should be modified to change the value of a job state from a first value to a second value in response to the launching of an error handling thread from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*,

47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Further, the Examiner has not shown why *Williams* should be modified to enhance visibility of the exact status of the requested task from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.* The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to change a value of a job state from a first value to a second value in response to the launching of an error handling thread. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to enhance visibility of the exact status of the requested task. *Id.* Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 6, 17 and 28.

Williams also does not teach or suggest "wherein said *first value signals that said job is available for scheduling*" as recited in claim 7 and similarly in claims 18 and 29. The Examiner directs Applicants' attention to column 3, lines 29-35 of *Williams* as teaching the above-cited claim limitation. Paper No. 6, page 7. Instead, as noted above, *Williams* teaches determining whether the task request's next execution time exceeds the pre-specified time interval. *Williams* further teaches that if the task request's next execution time does not exceed the pre-specified time interval, the task request is re-entered into priority-ordered queue in sorted position. Further, *Williams* teaches that if the task request's next execution time does exceed the pre-specified time interval, the task request is discharged from memory. *Williams* does not teach or suggest a value that signals that a job is available for scheduling. Instead, *Williams* teaches determining whether the next execution time and a task request exceeds a pre-specified time interval to determine if the task request is re-entered into the priority-ordered queue or discharged from memory. Accordingly, for at least the reason that *Williams* has not been shown to teach or suggest the limitation

of claims 7, 18 and 29, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 7, 18 and 29.

B. The Examiner has not provided any motivation for combining Williams and Threlkeld.

A *prima facie* showing of obviousness requires the Examiner to establish, *inter alia*, that the prior art references teach or suggest, either alone or in combination, all of the limitations of the claimed invention, and the Examiner must provide a motivation or suggestion to combine or modify the prior art reference to make the claimed inventions. M.P.E.P. § 2142. The motivation or suggestion to combine references must come from one of three possible sources: the nature of the problem to be solved, the teaching of the prior art and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The showings must be clear and particular. *In re Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.*

In order to reject under 35 U.S.C. § 103, therefore, the Examiner must provide a proper motivation for combining or modifying the references. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-1458 (Fed. Cir. 1998); M.P.E.P. § 2142. The Examiner's motivation for modifying *Williams* to retry the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, to respond to an error condition, as recited in claims 8, 19 and 30, is "because this would allow a task to be completed if it is not completed the first time by relaunching *Williams*' whole process over again, thereby completing the requested task." Paper No. 6, page 7. Further, the Examiner's motivation for modifying *Williams* to repeat the step of retrying until a predetermined time interval has elapsed, as recited in claims 9, 20 and 31, is "because this would further allow tasks that could

not be completed and relaunched the second time to attempt again at a later time when there might be less network congestion, for example." Paper No. 6, page 8.

There is no motivation to combine *Williams* with *Threlkeld*. In particular, there is no suggestion or motivation in either *Williams* or *Threlkeld*, or in their combination, in the knowledge of those ordinarily skilled in the art, to combine the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, with the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*. *Williams* states:

A scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system is presented. All task requests that are scheduled to be executed within a pre-specified interval of time, are serviced according to their priority. During heavy load times, the scheduling governor prevents overloads of the processing resources of the host computer by limiting the number of concurrently executing scheduled tasks to a pre-specified capacity dimension. Task requests that are unable to be run due to the governed cap on the number of allowed concurrently executing processes are given a priority to be executed once one of the fixed number of execution slots becomes available. Accordingly, the scheduling governor allows each scheduled task to be executed as close to its scheduled time as possible yet prevents system resource overload to improve efficiency and performance. Abstract.

Thus, *Williams* teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system. *Threlkeld* states:

Briefly, the above and further objects of the present invention are realized by providing a new and improved system and method for *processing recurrent*

information processing operations without requiring substantial input from a user, and which facilitates processing in more than one time zone. Column 2, lines 12-18.

Thus, *Threlkeld* teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone.

The Examiner has not shown why the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, should be combined with the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*, from either the nature of the problem to be solved, the teaching in the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The Examiner must submit **objective evidence** and not rely on his own subjective opinion for combining *Williams*, which teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system with *Threlkeld*, which teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002).

Moreover, the Examiner has not shown why *Williams* should be modified to retry the steps of determining if a job is available for scheduling, determining if a session is available and launching the session, in response to an error condition, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q. 2d 1453, 1458 (Fed. Cir. 1998). Further, the Examiner has not shown why *Williams* should be modified to relaunch *Williams'* whole process over again if a task is not completed the first time from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner has not shown why *Williams* should be modified to repeat the step of retrying until a

predetermined time interval has elapsed from either the nature of the problem to be solved, the teaching in the prior art of the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner has not shown why *Williams* should be modified to repeat the relaunch sequence in *Williams*' system when there might be less network congestion from either the nature of the problem to be solved, the teaching in the prior art or the knowledge of persons of ordinary skill in the art. *Id.*

The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to retry the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, in response to an error condition. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to relaunch *Williams*' whole process over again if the task is not completed the first time. *Id.* Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to repeat the step of retrying until a predetermined time interval has elapsed. *Id.* Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to repeat the relaunch sequence in *Williams*' system at a later time when there might be less network congestion. *Id.* Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 8-9, 19-20 and 30-31.

C. ***Williams* and *Threlkeld*, taken singly or in combination, do not teach or suggest the following limitations.**

Williams and *Threlkeld*, taken singly or in combination, do not teach or suggest "the step of retrying said steps of determining if a job is available for scheduling, determining if a session is available, and launching said session, in response to an error condition" as recited in claim 8 and similarly in claims 19 and 30. The Examiner directs Applicants' attention to column 8, lines 30-49 in Figure 7A of

Threlkeld as teaching the above-cited claim limitation. Paper No. 6, page 7. Instead, *Threlkeld* states:

Upon the job being removed from the list at box 721 (FIG. 7B), a determination is made at decision box 723 as to whether the job ended in error. If there was no error, the job end date is set at box 725 before the job monitoring operation proceeds to decision box 714 (FIG. 7A). *When an error is detected at decision box 723, a determination is made at decision box 727 regarding the ability to relaunch the job. Where the job cannot be relaunched, an error message is set at box 729 before the job monitoring operation proceeds to decision box 714 (FIG. 7A). If the job can be relaunched, a determination is made at decision box 731 as to whether the job can be relaunched immediately. A determination that the job can be relaunched causes the job to be set for relaunching now at box 733, and the job monitoring operation proceeds to decision box 714 (FIG. 7A). A determination that the job cannot be relaunched immediately is followed by a determination at decision box 735 as to whether the job can be relaunched after a delay period.* Column 8, lines 30-49.

Thus, *Threlkeld* teaches that a job may be relaunched under certain conditions. However, this language does not teach retrying the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, in response to an error condition. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 8, 19 and 30. M.P.E.P. §2143.

Williams and *Threlkeld*, taken singly or in combination, do not teach or suggest "wherein said step of retrying is repeated until a predetermined time interval has elapsed" as recited in claim 9 and similarly in claims 20 and 31. The Examiner directs Applicants' attention to column 8, lines 30-49 of *Threlkeld* as teaching the above-cited claim limitation. Paper No. 6, page 8. As noted above, *Threlkeld* teaches

that a job may be relaunched under certain conditions. However, this language does not teach repeating the step of retrying the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, in response to an error condition until a predetermined time interval has elapsed. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 9, 20 and 31. M.P.E.P. §2143.

D. The Examiner has not provided any motivation for combining *Williams* and *Threlkeld* with *Hlasnik*.

As noted above, in order to reject under 35 U.S.C. § 103, the Examiner must provide a proper motivation for combining or modifying the references. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-1458 (Fed. Cir.); M.P.E.P. § 2142. The Examiner's motivation for modifying *Williams*' to register a callback method in response to an expiring of the predetermined time interval, as recited in claims 10, 21 and 32, is "because this would allow the client application to perform its function and then return control to *Williams*' host computer (target system) when the time does expire." Paper No. 6, pages 8-9. Further, the Examiner's motivation for modifying *Williams* to perform the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to an invoking of the callback method by a target system is because "this would allow the client application to perform its function and then return control to *Williams*' host computer (target system) when the time does expire, and thus have the requested task be entered into the thread and be completed." Paper No. 6, page 9.

There is no motivation to combine *Williams*, *Threlkeld* and *Hlasnik*, as there is no suggestion or motivation in either *Williams*, *Threlkeld* or *Hlasnik*, or in their combination, or in the knowledge of those ordinarily skilled in the art, to combine the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, with the teaching of processing recurrent information processing operations that

accommodate processing operations in more than one time zone, as taught in *Threlkeld*, with the teaching of providing a computer application with periodic preemptive access to system resources, as taught in *Hlasnik*. As stated above, *Williams* teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system. Further, as stated above, *Threlkeld* teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone. Further, *Hlasnik* states:

An apparatus and method for controlling system resource access to a computer application program in an otherwise synchronous, non-preemptive operating environment. A periodic preemption mechanism (PPM) is used to provide periodic CPU access to a client application. Initially, the client application registers a callback address with the PPM. Subsequently, the PPM periodically initiates a preemptive event, upon which the PPM checks for certain critical conditions. If there are no critical conditions, then the PPM saves critical registers of the CPU, then calls the client application at its callback address. In response, the client application performs its function then returns control to the PPM. The PPM then restores the critical registers of the CPU and returns control to the application that was running when the preemptive event occurred. The PPM behaves in a manner in which the operating system is generally unaware of the preemption. *Hlasnik*, Abstract.

Thus, *Hlasnik* teaches providing a computer application with periodic preemptive access to system resources.

The Examiner has not shown why the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, and the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*, should be combined with the

teaching of a computer application with periodic preemptive access to system resources, as taught in *Hlasnik*, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The Examiner must submit **objective evidence** for combining *Williams*, which teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over another computer system, with *Threlkeld*, which teaches processing recurring information processing operations that accommodate processing operations in more than one time zone, with *Hlasnik*, which teaches a computer application with periodic preemptive access to system resources. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002).

Moreover, the Examiner has not shown why *Williams* should be modified to register a callback method in response to an expiry of the predetermined time interval, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Further, the Examiner has not shown why *Williams* should be modified to allow a client application to perform its function and then return control to *Williams'* host computer when the time does expire from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner has not shown why *Williams* should be modified to form the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to invoking of the callback method by a target system from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.*

The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to register a callback method in response to an expiry of the predetermined time interval. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence**

and not rely on his own subjective opinion in support of modifying *Williams* to allow a client application to perform its function and then return control to *Williams*' host computer when the time does expire. *Id.* Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Williams* to perform the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to invoking of the callback method by a target system. *Id.* Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 10-11, 21-22 and 32-33.

E. ***Williams, Threlkeld and Hlasnik, taken singly or in combination, do not teach or suggest the following claims limitations.***

Williams, Threlkeld, and Hlasnik, taken singly or in combination, do not teach or suggest "registering a callback method in response to an expiry of said predetermined time interval" as recited in claim 10 and similarly in claims 21 and 32. The Examiner directs Applicants' attention to the Abstract, column 6, lines 48-55 and column 6, line 62 to column 7, line 10 of *Hlasnik* as teaching the above-cited claim limitation. Paper No. 6, page 8. Instead, *Hlasnik* states:

The PPM 460 includes a saving means 461, a control transfer means 462, a restoring means 463, a *callback registration means 464*, and a disabling means 465. The saving means 461 is for saving the state of the computing environment. This can include hardware and software used to save the registers of the processor and other state information. The control transfer means 462 is for transferring control to a client application. The restoring means 463 is for restoring the state of the computing environment and can include hardware and software used to restore the registers of the processor and other state information. *The callback registration means 464 is for registering a callback address. For example, this could be a register, or it could be some instructions which store the callback address to memory.* The disabling means 465 is for selectively disabling the PPM 460 from preempting a client application.

Hlasnik, Column 6, line 62 to Column 7, line 10 (emphasis added).

Thus, *Hlasnik* teaches callback registration means for registering a callback address. The callback address may be used by a periodic preemption mechanism to call the client application. This language does not teach registering a callback method in response to an expiry of the predetermined time interval. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 10, 21 and 32. M.P.E.P. §2143.

Williams, *Threlkeld* and *Hlasnik*, taken singly or in combination, do not teach or suggest "wherein said steps of determining if a job is available for scheduling, determining if a session is available, and launching said session, performed in response to invoking of said callback method by a target system, said target system for execution of said job" as recited in claim 11 and similarly in claims 22 and 33. The Examiner directs Applicants' attention to the Abstract, column 6, lines 48-55 and column 6, line 62 to column 7, line 10 of *Hlasnik* as teaching the above-cited claim limitation. Paper No. 6, page 9. Instead, as stated above, *Hlasnik* teaches registering a callback address which may be used by a periodic preemptive mechanism to call the client application at its callback address. The callback address taught in *Hlasnik* is essentially used as a pointer to an address. Thus, *Hlasnik* does not teach invoking a callback method by a target system. Further, *Williams*, *Threlkeld* and *Hlasnik*, do not teach or suggest the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session are performed in response to an invoking of the callback method by a target system. Further, *Williams*, *Threlkeld* and *Hlasnik*, do not teach or suggest a target system for execution of the job. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 11, 22 and 33. M.P.E.P. §2143.

F. Conclusion Regarding 35 U.S.C. § 103 Rejections.

As a result of the foregoing, Applicants respectfully assert that the Examiner's *prima facie* case of obviousness is not taught or suggested by the cited prior art since there are numerous claim limitations not taught or suggested in the cited prior art, and thus the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 4, 6-7, 15, 17-18, 26 and 28-29 in view of the cited prior art.

It is noted that words are italicized only for emphasis. Words that are italicized are not meant to imply that only those limitations are not taught or suggested in the cited prior art.

VII. INTERVIEW SUMMARY:

Applicants appreciate the Examiner for discussing the office action and in particular claim 1 with Applicants on April 30, 2003. In particular, the passages of column 2, line 58 - column 3, line 2 and column 3, lines 10-26 of *Williams* was discussed regarding disclosing the limitation of "determining, in response to said step of determining if said job is available, if a session is available, wherein said session is included in a pool of sessions, said pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of said job and wherein said session effects an execution of said job" recited in claim 1. Applicants respectfully assert that *Williams* does not disclose the above-cited limitation for the reasons stated above.

VIII. CONCLUSION

As a result of the foregoing, it is asserted by Applicants that claims 1-33 in the Application are in condition for allowance, and Applicants respectfully request an allowance of such claims. Applicants respectfully request that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

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